# A DICTIONARY OF GENETIC ENGINEERING

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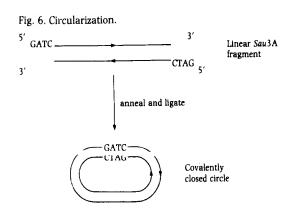
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cleave This term has essentially its normal English usage and means to make a double-stranded cut in DNA with a restriction endonuclease.

clone This term is used in a number of senses. As a noun it may mean (i) a population of recombinant DNA molecules all carrying the same inserted sequence, or (ii) a population of cells or organisms of identical genotype. It is most frequently used to describe a colony of microorganisms which harbour a specific DNA fragment inserted into a vector molecule.

As a verb 'to clone' means to use *in vitro* recombination techniques to insert a particular gene or other DNA sequence into a vector molecule.

Cm<sup>r</sup>, Cm<sup>s</sup> Chloramphenicol resistant, chloramphenicol sensitive.

coding capacity The amount of protein which can be specified by a given DNA or RNA sequence. Estimates of coding capacity usually require assumptions about the absence of introns or of overlapping genes; as a rough guide 1 megadalton of double-stranded DNA can encode 60–70000 daltons of protein.

coding sequence That portion of a gene which directly specifies the amino acid sequence of its protein product. Non-coding sequences of genes include control regions, such as promoters, operators and terminators as well as the intron sequences of certain eukaryotic genes.

coding strand The strand of duplex DNA which is transcribed into a complementary mRNA molecule.

### coding strand

3' TACTTTCGCAAATCACCCGCGGGCATA 5

5' ATGAAAGCGTTTAGTGGGCGCCCGTAT 3'

mRNA 5' AUGAAAGCGUUUAGUGGGCGCCCGUAU 3'

amino acid. (Se

codon bias While arranged into ( twenty amino) exhibits consid specified by mc a particular co amino acid, it i

significant bar. heterologous c

### cohesive ends Sea

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### Col-factor A plas

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colony hybridisa a radioactivel colonies. Colo nitrocellulose grown up on denature the baked on. Rahybridised to subsequently complementa from the mas Colony hyl case the cells